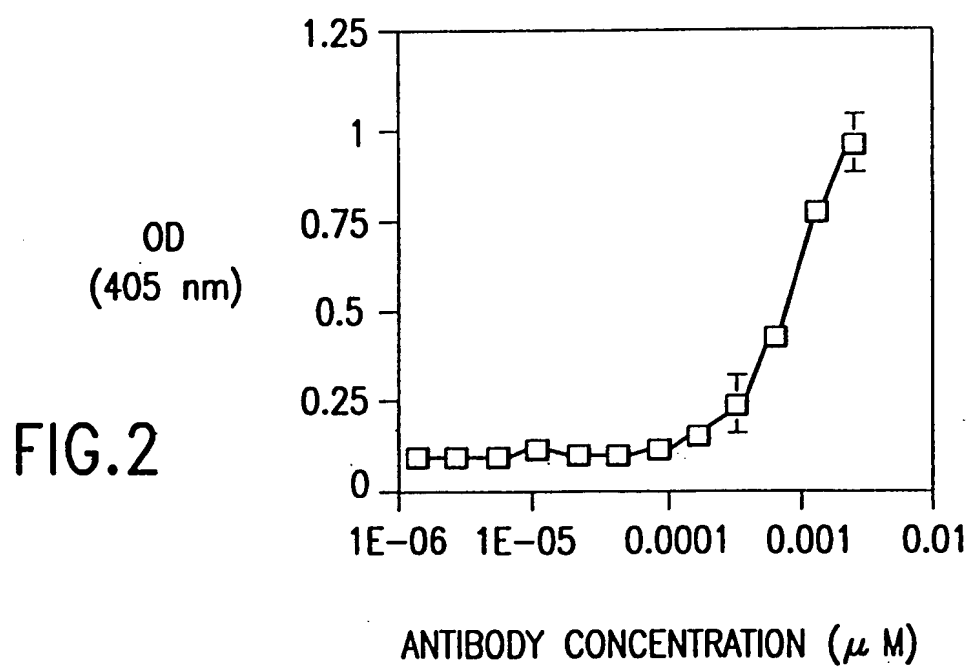


FIG.1



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CLONE 14

GIINANDPLPFWFMS--PYTPGPAPIDINASRALVS-NESG

WQGTHFPYT

LVSKNDSG

CDR3L

CDR2L

(5/9 = 55.5 %)

(7/8 = 87.5 %)

CLONE 17

DL-SRNLDGFRFLLYNA--YVPGFTPTFISLTAEHLSSPKG

LVSKN-DSG

WQGTHF-P-YT

CDR2L

CDR3L

(6/8 = 75 %)

(6/9 = 66.6 %)

CLONE 15

CGRAYCL-SGNYNIFGALFPGVS--TPYADVGHDDAQSWRR

LVSKN-DS-G WQG-THFPYT

CDR2L

CDR3L

(4/8 = 50 %) (6/9 = 66.6 %)

CLONE 13

RCSPIW-GIS-YPFGLLSSNPGVCHSSDAET-NIRNDILTT

WQG-THFPYT

GSDN-K-SVL

CDR3L

CDR2L(REV)

(6/9 = 66.6 %)

(4/8 = 50 %)

CLONE 16

GHSNYCFVSTLGMPIVGFP-SINARGLIHYGGSDPR--LAA

WQGTHFPYT

GSDNKSVL

CDR3L

CDR2L(REV)

(3/9 = 33.3 %)

(5/8 = 62.5 %)

FIG.3

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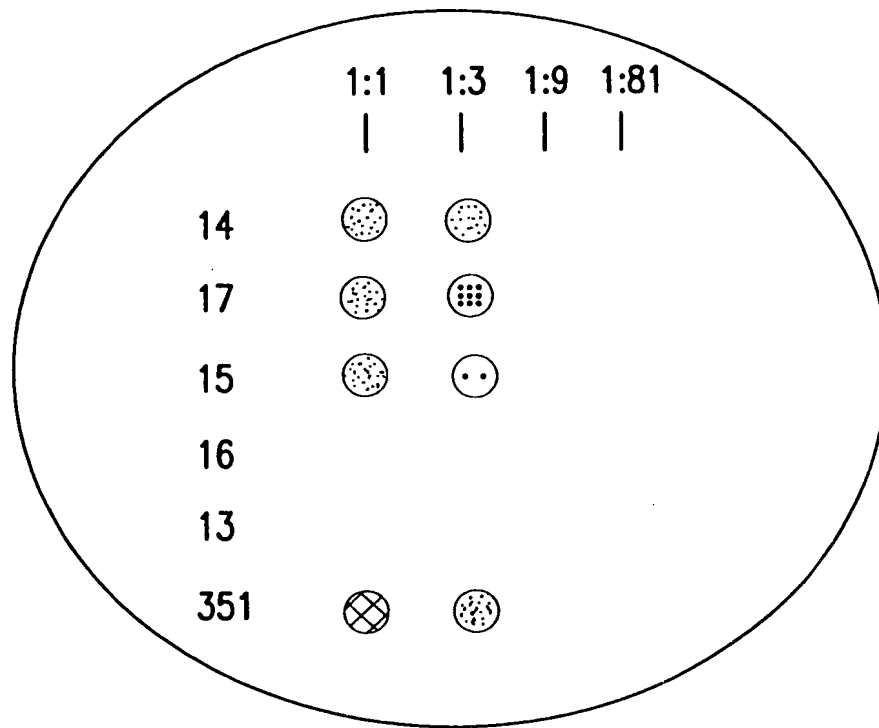


FIG.4

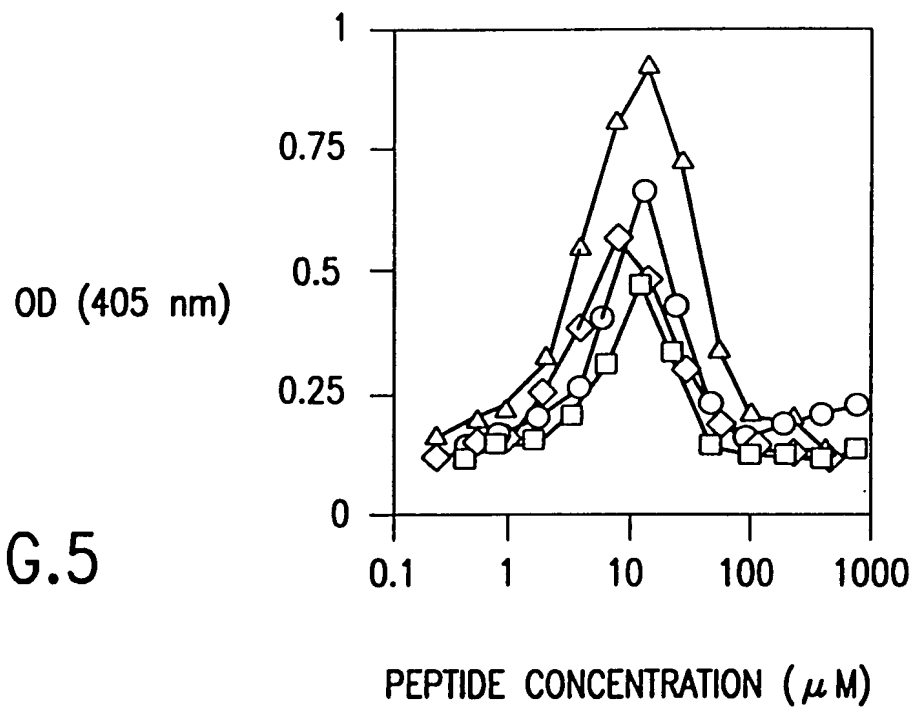


FIG.5

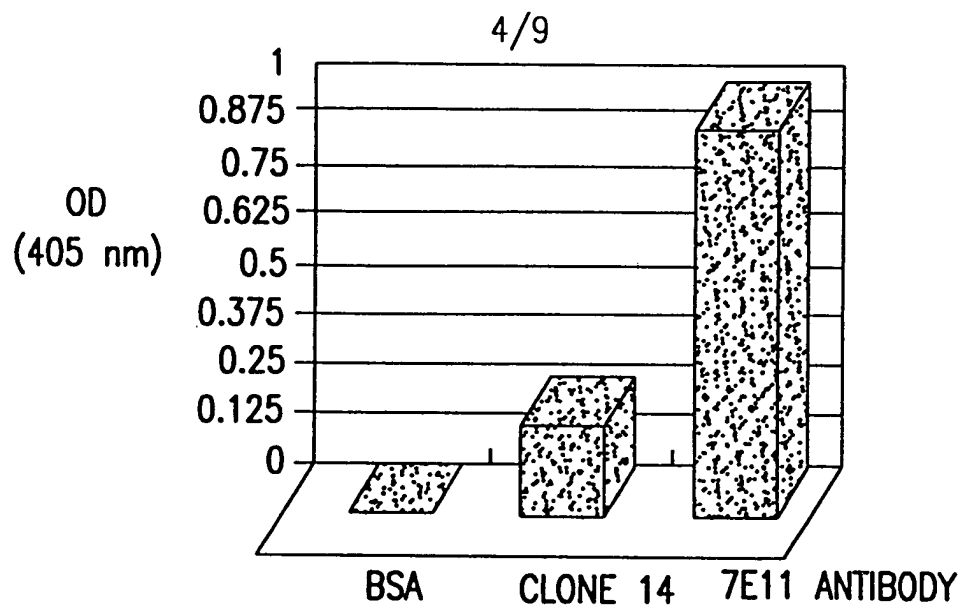


FIG.6

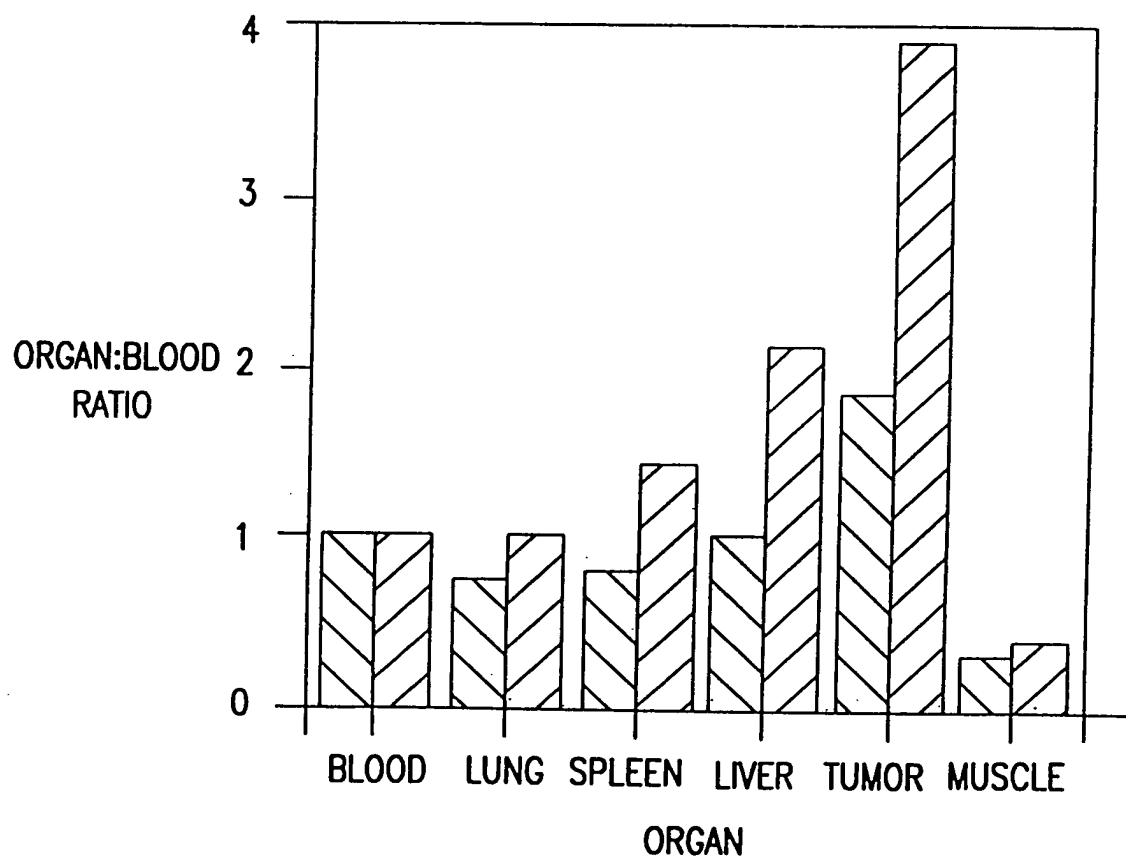
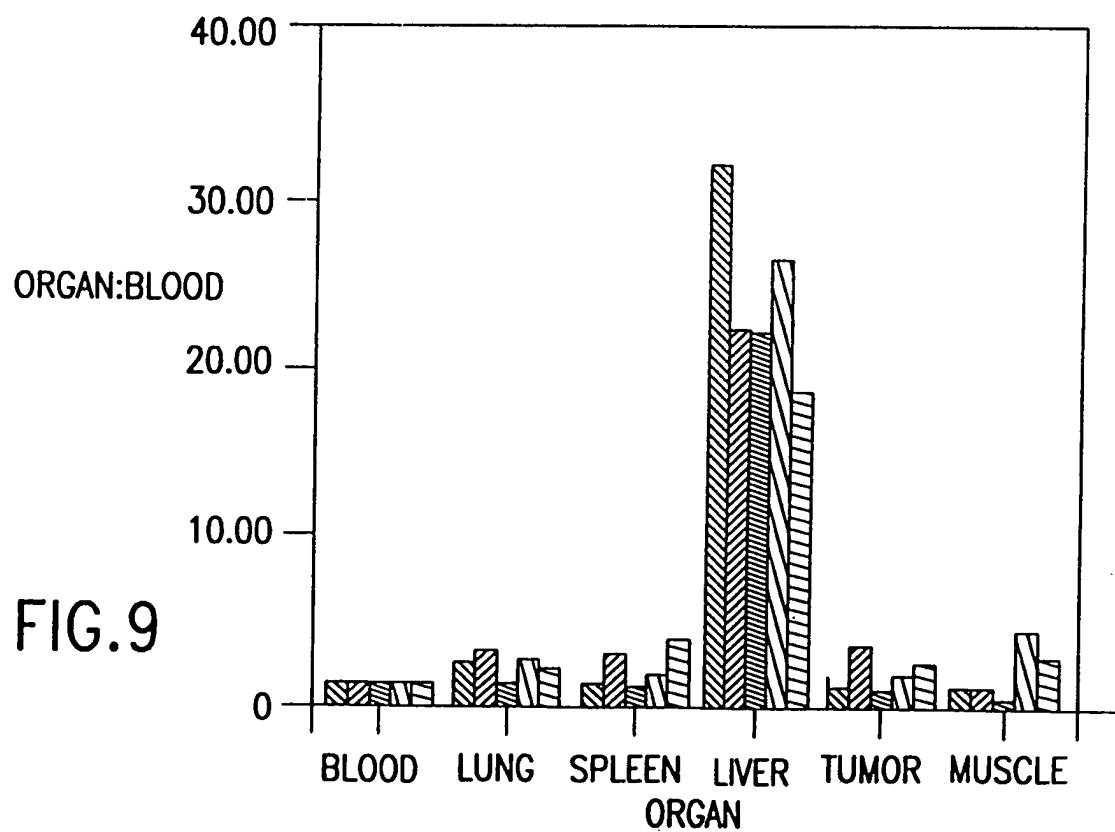
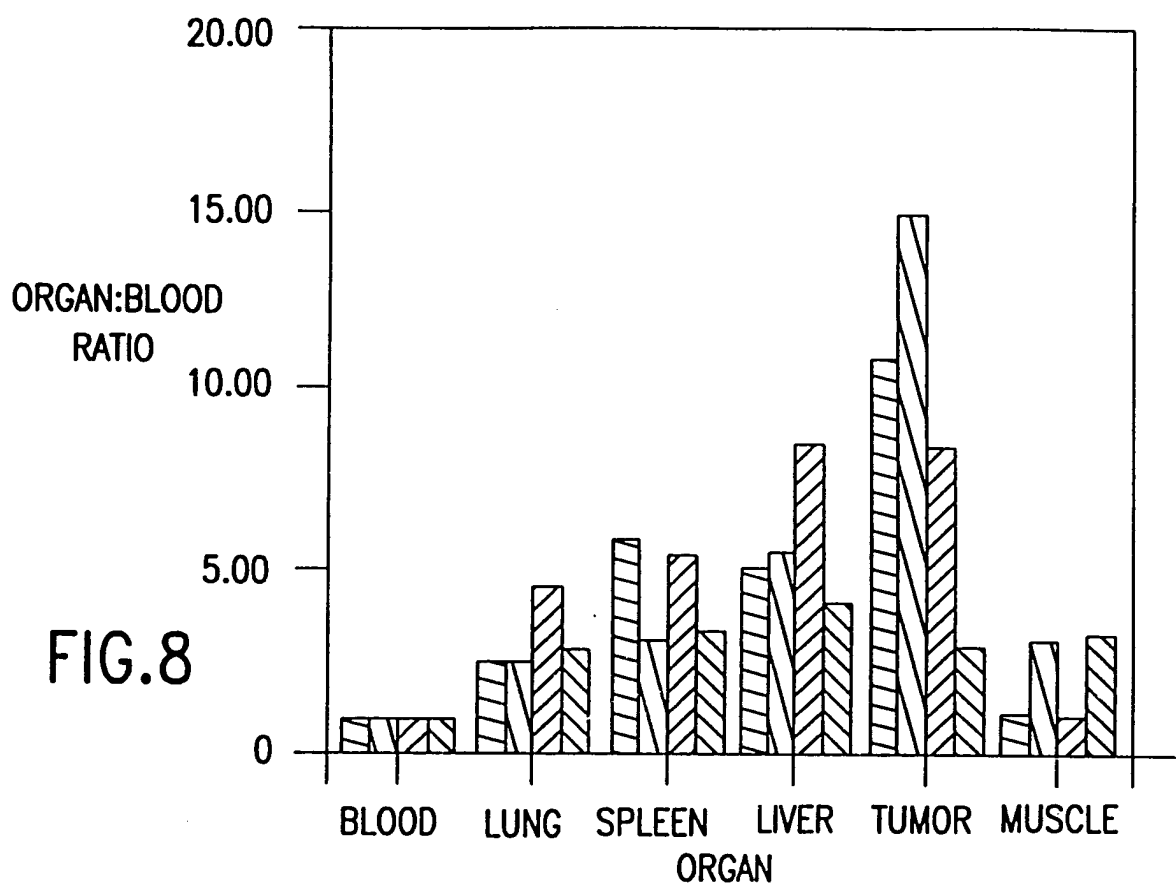


FIG.7



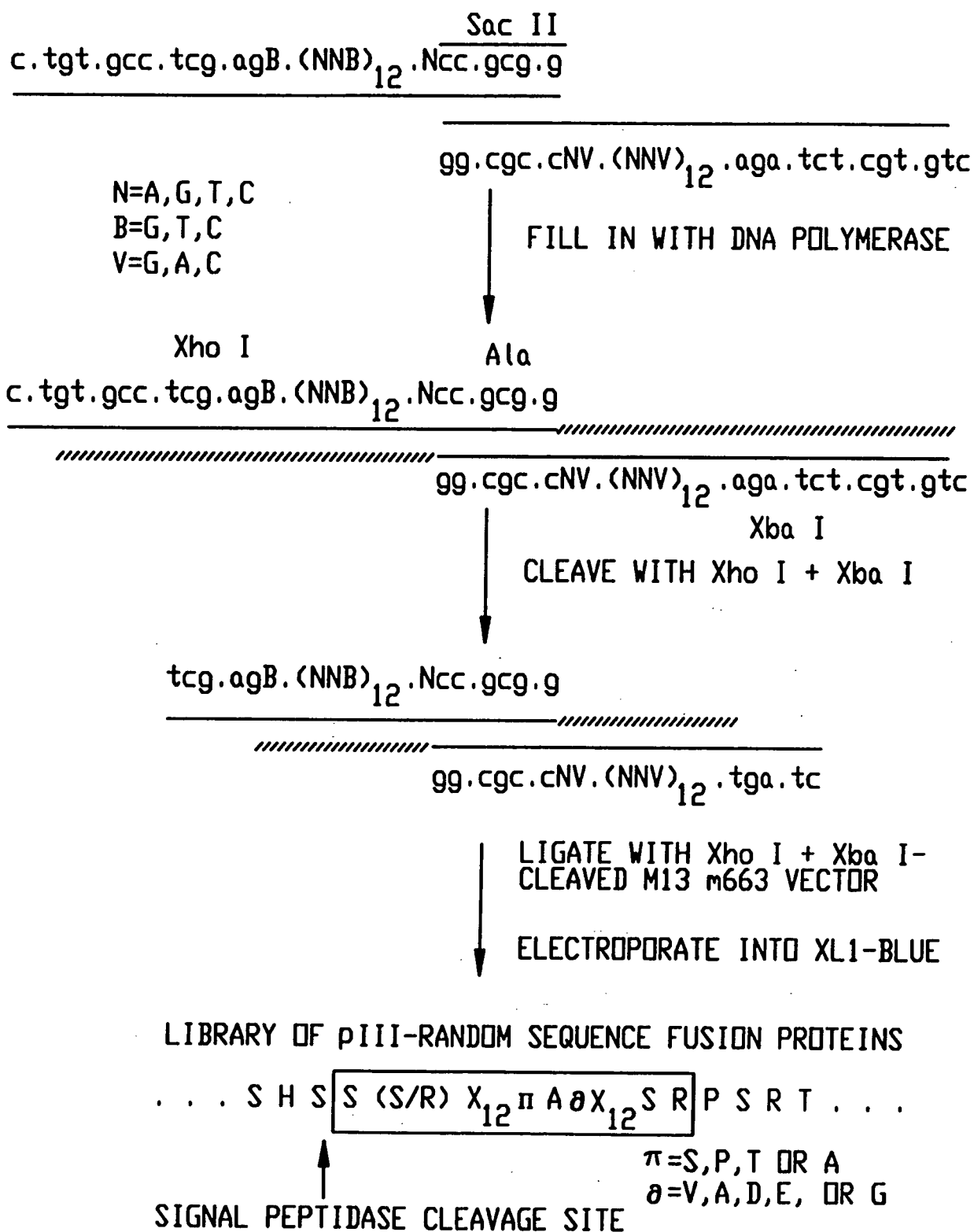


FIG.10

G TGT GTC TCG AGN (NNB)<sub>20</sub> NAC GCC AN

N=A,C,G,T  
B=C,G,T  
V=A,C,G

NTG CGG TNV (NNV)<sub>15</sub> AGA TCT GTG TTG

FILL IN WITH SEQUENASE

Xho I

G TGT GTC TCG AGN (NNB)<sub>20</sub> NAC GCC AN

NTG CGG TNV (NNV)<sub>15</sub> AGA TCT GTG TTG  
Xba I

RESTRICT WITH Xho I AND Xba I

TCG AGN (NNB)<sub>20</sub> NAC GCC AN

NTG CGG TNV (NNV)<sub>15</sub> AGA TC

LIGATE WITH Xho I + Xba I-  
CLEAVED M13mp18Xa

ELECTROTRANSFORM  
E. coli JS5

D38 GENETIC DIVERSITY LIBRARY DISPLAYED AS RANDOM  
N-TERMINAL pIII FUSIONS

. . H S S (S/R) X<sub>20</sub> (Y/H/N/D) A (I/M/T/N/K/S/R) X<sub>15</sub> S R

↑  
SIGNAL PEPTIDASE CLEAVAGE SITE

FIG.11

G TGT GTC TCG AGN (NNB)<sub>20</sub> GGT TGT GGT

---

N=A,C,G,T  
B=C,G,T  
V=A,C,G

CCA ACA CCA (NNV)<sub>20</sub> AGA TCT GTG TTG

---

FILL IN WITH SEQUENASE

Xho I

G TGT GTC TCG AGN (NNB)<sub>20</sub> GGT TGT GGT

---

CCA ACA CCA (NNV)<sub>20</sub> AGA TCT GTG TTG  
Xba I

---

RESTRICT WITH Xho I AND Xba I

TCG AGN (NNB)<sub>20</sub> GGT TGT GGT

---

CCA ACA CCA (NNV)<sub>20</sub> AGA TC

---

LIGATE WITH Xho I + Xba I-  
CLEAVED M13mp18Xa

ELECTROTRANSFORM  
E. coli JS5

DC43 GENETIC DIVERSITY LIBRARY DISPLAYED AS RANDOM  
N-TERMINAL pIII FUSIONS

. . H S S (S/R) X<sub>20</sub> G C G X<sub>20</sub> S R

↑  
SIGNAL PEPTIDASE CLEAVAGE SITE

FIG.12





**FIG. 13**